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<110> TALL, ALAN R WELCH, CARRIE L LIANG, CHIEN-PING	
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384

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Asn Glu Lys Ser Lys Glu Glu Glu Leu Leu Gln Lys Asn Gln Asn 115 120 125

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Lys Ser Lys Glu Gln Glu Leu Leu Gln Met Ile Gln Asn Leu Gln 165 170 175

Glu Ala Leu Gl
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ctc tta aaa caa tac caa gcg aac ctt act cag cag gat cgt atc ctg Leu Leu Lys Gln Tyr Gln Ala Asn Leu Thr Gln Gln Asp Arg Ile Leu 65 70 75 80	240
gaa ggg cag atg tta gcc cag cag aag gca gaa aac act tca ccg caa Glu Gly Gln Met Leu Ala Gln Gln Lys Ala Glu Asn Thr Ser Pro Gln 85 90 95	288
tca aag aag gaa ctg aaa gga aag ata gac acc ctc acc cag aag ctg Ser Lys Lys Glu Leu Lys Gly Lys Ile Asp Thr Leu Thr Gln Lys Leu 100 105 110	336
aac gag aaa tcc aaa gag cag gag gag ctt cta cag aag aat cag aac Asn Glu Lys Ser Lys Glu Gln Glu Glu Leu Leu Gln Lys Asn Gln Asn 115 120 125	384
ctc caa gaa gcc ctg caa aga gct gca aac tct tca gag gag tcc cag Leu Gln Glu Ala Leu Gln Arg Ala Ala Asn Ser Ser Glu Glu Ser Gln 130 135 140	432
aga gaa ctc aag gga aag ata gac acc ctc acc ttg aag ctg aac gag Arg Glu Leu Lys Gly Lys Ile Asp Thr Leu Thr Leu Lys Leu Asn Glu 145 150 150	480
aaa too aaa gag cag Lys Ser Lys Glu Gln 165	495
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                                25
Trp Trp Phe Pro Ala Ala Met Thr Leu Val Ile Leu Cys Leu Val Leu
Ser Val Thr Leu Ile Val Gln Trp Thr Gln Leu Arg Gln Val Ser Asp
                       55
Leu Leu Lys Gln Tyr Gln Ala Asn Leu Thr Gln Gln Asp Arg Ile Leu
                    70
Glu Gly Gln Met Leu Ala Gln Gln Lys Ala Glu Asn Thr Ser Pro Gln
Ser Lys Lys Glu Leu Lys Gly Lys Ile Asp Thr Leu Thr Gln Lys Leu
Asn Glu Lys Ser Lys Glu Gln Glu Glu Leu Leu Gln Lys Asn Gln Asn
Leu Gln Glu Ala Leu Gln Arg Ala Asn Ser Ser Glu Glu Ser Gln
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Arg Glu Leu Lys Gly Lys Ile Asp Thr Leu Thr Leu Lys Leu Asn Glu
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Lys Ser Lys Glu Gln
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Met Thr Phe Asp Asp Lys Met Lys Pro Ala Asn Asp Glu Pro Asp Gln
aag toa tgt ggc aag aag cot aaa ggt otg cat ttg ott tot too coa
                                                                     96
Lys Ser Cys Gly Lys Lys Pro Lys Gly Leu His Leu Leu Ser Ser Pro
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20		25	30									
		ctg gtc atc ctc tgc Leu Val Ile Leu Cys 45										
		aca caa tta cgc cag Thr Gln Leu Arg Gln 60										
		ctt act cag cag gat Leu Thr Gln Gln Asp 75										
		aag gca gaa aac act Lys Ala Glu Asn Thr 90										
	ı Leu Lys Gly Lys	ata gac acc ctc acc Ile Asp Thr Leu Thr 105										
		gag ctt cta cag aag Glu Leu Leu Gln Lys 125										
ctc caa gaa gcc Leu Gln Glu Ala 130	c ctg caa aga gct a Leu Gln Arg Ala . 135	gca aac ttt tca ggt Ala Asn Phe Ser Gly 140	cct tgt cca 432 Pro Cys Pro									
		aac tgt tac ctc ttc Asn Cys Tyr Leu Phe 155										
		acc tgc caa tct ttg Thr Cys Gln Ser Leu 170										
	e Asn Gly Ala Asp	gat ctg aca ttc atc Asp Leu Thr Phe Ile 185										
		tgg att gga ttg cat Irp Ile Gly Leu His 205										
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<400> 26												
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Lys Ser Cys Gly Lys Lys Pro Lys Gly Leu His Leu Leu Ser Ser Pro

25

_	_		_													
Trp	Trp	Phe 35	Pro	Ala	Ala	Met	Thr 40	Leu	Val	Ile	Leu	Cys 45	Leu	Val	Leu	
Ser	Val 50	Thr	Leu	Ile	Val	Gln 55	Trp	Thr	Gln	Leu	Arg 60	Gln	Val	Ser	Asp	
Leu 65	Leu	Lys	Gln	Tyr	Gln 70	Ala	Asn	Leu	Thr	Gln 75	Gln	Asp	Arg	Ile	Leu 80	
Glu	Gly		Met	Leu 85	Ala	Gln	Gln	Lys	Ala 90	Glu	Asn	Thr	Ser	Gln 95	Glu	
Ser	Lys	Lys	Glu 100	Leu	Lys	Gly	Lys	Ile 105	Asp	Thr	Leu	Thr	Gln 110	Lys	Leu	
Asn	Glu	Lys 115	Ser	Lys	Glu	Gln	Glu 120	Glu	Leu	Leu	Gln	Lys 125	Asn	Gln	Asn	
Leu	Gln 130	Glu	Ala	Leu	Gln	Arg 135	Ala	Ala	Asn	Phe	Ser 140	Gly	Pro	Cys	Pro	
Gln 145	Asp	Trp	Leu	Trp	His 150	Lys	Glu	Asn	Cys	Tyr 155	Leu	Phe	His	Gly	Pro 160	
Phe	Ser	Trp	Glu	Lys 165	Asn	Arg	Gln	Thr	Cys 170	Gln	Ser	Leu	Gly	Gly 175	Gln	
Leu	Leu	Gln	Ile 180	Asn	Gly	Ala	Asp	Asp 185	Leu	Thr	Phe	Ile	Leu 190	Gln	Ala	
Ile	Ser	His 195	Thr	Thr	Ser	Pro	Phe 200	Trp	Ile	Gly	Leu	His 205	Arg	Lys		
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															tgact	120
													-	_	gatcg	180

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240
tatoctggaa gggcagatgt tagcccagca gaaggcagaa aacacttcac aggaatcaaa
qaaqqaactq aaaggaaaga tagacaccct cacccagaag ctgaacgact ccaaagagca
                                                                      300
                                                                      360
qqaqqaqcta caccccccc gaacctccaa gaagccctgc aaagagctgc aaactcttca
ggtccttgtc cacaagactg gctctggcat aaagaaaact gttacctctt ccatgggccc
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tttagctqqq aaaaaaaccq gcagacctqc caatctttqq gtqqqcaqtt actacaaatt
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aatgqtqcaq atgatctqac attcatctta caagcaattt cccataccac ctccccttct
                                                                      540
tggattggat tgcatcggaa gaagcctggc aaccatgggt atgggagaat ggacttcttt
                                                                      600
qaattttaat ttttaagaca gggcgttttt acagtttttc ataaggactt gtgatactta
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       28
<211>
       721
<212>
       DNA
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                                                                      120
ctggtcatcc tctgcctggt gttgtcagtg acccttattg tacagtggac acaataggag
                                                                      180
                                                                      240
toccagagag aactcaaggg aaagatagac accetcacet tgaagetgaa egagaaatee
aaagagcagg aggagcttct acagaagaat cagaacctcc aagaagccct gcaaagagct
                                                                      300
gcaaactttt caggtccttg tccacaagac tggctctggc ataaagaaaa ctgttacctc
                                                                      360
ttccatqqqc cctttagctg ggaaaaaaac cggcagacct gccaatcttt gggtggccag
                                                                      420
ttactacaaa ttaatggtgc agatgatctg acattcatct tacaagcaat ttcccatacc
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_ _ _

540

600

660 720

721

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Asn Leu Gln Glu Ala Leu Gln Arg Ala Ala Asn Ser Ser Glu
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Leu Asn Glu Lys Ser Lys Glu Gln Met Glu Leu His His Gln Asn Leu
             20
                                  25
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Xaa Glu Lys Ser Lys Glu Gln Xaa Glu Leu Xaa Xaa Xaa Xaa Asn
            20
Leu Gln Glu Xaa Leu Xaa Arg Xaa Ala Asn Xaa Ser
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```

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<210> 40
 <211> 44
<212> PRT
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 <220>
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 <220>
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\langle 223 \rangle X<sub>1</sub> = E, Q, OR K
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\langle 222 \rangle (8)..(8)
\langle 223 \rangle X = M OR K
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          (13)...(13)
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          (14)^{-}.(14)
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(222) (29) (29) (29) (29) (29) (29) (29) (29) (29) (29)
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(222) (30)...(30)
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<220>
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<400> 40

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Leu Gln Glu Xaa Leu Xaa Arg Xaa Ala Asn Xaa Ser